Amendments to the Abstract

Please replace the abstract with the substitute abstract attached hereto.

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 20. (canceled)

21. (currently amended) A data structure, stored on a storage medium, in a database, comprising:

a plurality of data areas, each of said plurality of data areas being loaded with data each for a constant time generated in time series during a certain time, the plurality of date areas being managed by the time series; and

bookmark information areas respectively provided at predetermined locations in said plurality of data areas, each having a pair of bookmark information indicative of a time at which said data is loaded in a time series data piece for said constant time in each of said data areas and state transition information indicative of a state of the data piece in said each data area, said state transition information being allowed to have one of a value indicative of an online state in which the data area is permitted to be retrieved and a , a value indicative of a loading state in which loading

2